

**COMMONWEALTH OF VIRGINIA  
Department of Environmental Quality  
Tidewater Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

INGENCO  
Virginia Beach, Virginia  
Permit No. TRO61423

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, INGENCO has applied for a Title V Operating Permit for its Virginia Beach, Virginia, facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:\_\_\_\_\_ Date:\_\_\_\_\_

Air Permit Manager:\_\_\_\_\_ Date:\_\_\_\_\_

Deputy Regional Director:\_\_\_\_\_ Date:\_\_\_\_\_

## **FACILITY INFORMATION**

### Permittee

INGENCO  
2250 Dabney Road  
Richmond, Virginia 23230

### Facility

INGENCO  
1989 Jake Sears Road  
Virginia Beach, Virginia 23464

AFS ID No.: 51-810-00117

## **SOURCE DESCRIPTION**

SIC Code: 4911 - The source is an electrical power generation facility, using engines fueled by No. 2 fuel oil, No. 4 fuel oil, mineral oil dielectric fluid (MODEF), and treated landfill gas. The facility is comprised of 36 Detroit Diesel Series 60 engines. The total capacity of the facility is 350 kW output.

The facility is a Title V major source of NO<sub>x</sub> and CO. This source is located in a nonattainment area for all VOC and NO<sub>x</sub>. The facility is permitted under a major NSR permit issued on January 13, 2005.

## **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

## EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following :

Emission Unit Id.	Stack ID	Emission Unit Description	Size/Rated Capacity	Applicable Permit Date
1 - 36	1 - 6	Detroit Diesel Series 60 engines	350 kW output	NSR permit issued January 13, 2005
T37 - T40		Fuel Oil Tanks	(2) @ 20,000 gallons, each (2) @ 20,700 gallons, each	NSR permit issued January 13, 2005

## EMISSIONS INVENTORY

A copy of the 2003 annual emission statement is attached. Emissions are summarized in the following table.

### 2003 Actual Emissions

	2003 Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>
Total	6.0	32.0	2.5	2.7	36.7

## **EMISSION UNIT APPLICABLE REQUIREMENTS - Engines (Emission Units 1 - 36)**

### **Process Requirements**

The following Title V requirements are derived from the NSR permit issued January 13, 2005:

- Section III.A - conditions 1 - 5 and 7 - 8: Emission Controls
- Section III.A - condition 6: Fuel Type
- Section III.A - conditions 9 - 11: Monitoring Devices
- Section III.A - conditions 12 - 14: Monitoring Device Observation
- Section III.A - condition 15: Landfill Gas Treatment Equipment

### **Limitations**

The following Title V requirements are derived from the NSR permit issued January 13, 2005:

- Section III.B - conditions 1 - 3 and 6: Fuels
- Section III.B - condition 4: Fuel Throughput
- Section III.B - condition 5: Fuel Certification
- Section III.B - conditions 7 and 8: Emission Limits
- Section III.B - condition 9: Visible Emission Limit

Compliance with the emission limitations in the permit are determined through use of a calculation (Title V condition III.B.4). The calculation is dependent on the type of fuel used, and the specifications for that fuel type.

### **Continuing Compliance Determination**

The following Title V requirements are derived from the NSR permit issued January 13, 2005:

- Section III.C - condition 2: Treated Landfill Gas Moisture Content
- Section III.C - condition 3: Treated Landfill Gas Gross Calorific Value Tests
- Section III.C - condition 4: Landfill Gas Gross Calorific Value Tests
- Section III.C - conditions 5 and 6: Performance Validation Testing

In addition, condition 1 of Section III.C has been added to address periodic visual emissions monitoring, to show compliance with the visible emission standard.

### **Recordkeeping**

The following Title V requirement is derived from the NSR permit issued January 13, 2005:

- Section III.D - condition 1: On-Site Records

## **Testing**

The following Title V requirement is derived from the NSR permit issued January 13, 2005:  
Section III.E - condition 1: Test/Monitoring Ports

A table of test methods has been included in the permit if testing beyond that specified in individual conditions is performed. The Department and EPA have the authority to require testing not included in the permit if necessary to determine compliance with an emission limit or standard.

## **Notifications**

The following Title V requirements are derived from the NSR permit issued January 13, 2005:  
Section III.F - conditions 1 and 2: Notifications

## **New Source Review Permit General Conditions**

The following Title V requirements are derived from the NSR permit issued January 13, 2005:  
Section III.G - condition 1: Notification for Control Equipment Maintenance  
Section III.G - condition 2: Violation of Ambient Air Quality Standard  
Section III.G - condition 3: Maintenance/Operating Procedures  
Section III.G - condition 4: Registration/Update

## **Streamlined Requirements**

The following NSR requirements from the January 13, 2005, permit have not been included in the Title V operating permit. These conditions have been completed by the source.  
Condition 29 - 31: Initial Performance Tests  
Condition 32: Visible Emissions Evaluation

## **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

### **Comments on General Conditions**

#### **B. Permit Expiration**

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

#### **F. Failure/Malfunction Reporting**

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

#### **U. Malfunction as an Affirmative Defense**

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

#### **Y. Asbestos Requirements**

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

## INAPPLICABLE REQUIREMENTS

The following requirements have been identified by the permittee as inapplicable:

Citation	Description of Requirement	Justification
40 CFR Part 63, Subpart ZZZZ 67 FR 77830	RICE MACT	The INGENCO facility is not a major HAP source and is not located at a major HAP source.
40 CFR §60.752(b)(2)(iii)(B)	40 CFR Part 60, Subpart WWW NMOC Reduction	The INGENCO facility uses landfill gas that has been treated as provided in 40 CFR §60.752(b)(2)(iii)(C), and is exempt from NMOC reduction requirements.

## INSIGNIFICANT EMISSION UNITS

No insignificant emissions units have been identified.

## CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

## PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in the Virginian-Pilot from Tuesday, January 18, 2005 to February 18, 2005.

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**Tidewater Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

**SIGNIFICANT PERMIT MODIFICATION**

INGENCO Virginia Beach Plant  
Virginia Beach, Virginia  
Permit No. TRO61423

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, INGENCO has applied for a modification to the Title V Operating Permit for its dual fuel electric power generating facility. The Department has reviewed the application and has prepared a modified Title V Operating Permit.

Engineer/Permit Contact:	<u>Linda K. Lightfoot</u> (757) 518-2005	Date:	<u>December 6, 2007</u>
Air Permit Manager:	<u>Jane A. Workman</u>	Date:	<u>December 6, 2007</u>
Regional Director:	<u>Francis L. Daniel</u>	Date:	<u>December 6, 2007</u>

## **FACILITY INFORMATION**

### Permittee

INGENCO  
2250 Dabney Road  
Richmond, Virginia 23060

### Facility

INGENCO Virginia Beach Plant  
1989 Jake Sears Road  
Virginia Beach, Virginia

County-Plant Identification Number: 51-810-00117

## **SOURCE DESCRIPTION**

### *NAICS 221119 – Other Electric Power Generation*

This U.S. industry comprises establishments primarily engaged in operating electric power generation facilities (except hydroelectric, fossil fuel, nuclear). These facilities convert other forms of energy, such as solar, wind, or tidal power, into electrical energy. The electric energy produced in these establishments is provided to electric power transmission systems or to electric power distribution systems.

### *NAICS 221112 – Fossil Fuel Electric Power Generation*

This U.S. industry comprises establishments primarily engaged in operating fossil fuel powered electric power generation facilities. These facilities use fossil fuels, such as coal, oil, or gas, in internal combustion or combustion turbine conventional steam process to produce electric energy. The electric energy produced in these establishments is provided to electric power transmission systems or to electric power distribution systems.

Specifically, this facility is an electrical power generation facility, using engines fueled by No. 2 fuel oil, No. 4 fuel oil, mineral oil dielectric fluid (MODEF), and treated landfill gas.

The facility is a Title V major source of carbon monoxide and nitrogen oxides. This source is located in an attainment area for all pollutants. The facility is permitted under a state major permit issued on June 20, 2006.

## **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

## **REQUESTED MODIFICATION AND REASON FOR MODIFICATION**

The Virginia Department of Environmental Quality issued a significant amendment to the New Source Review permit for INGENCO on June 20, 2006. This Title V modification is for the incorporation of the conditions of the June 20, 2006 New Source Review permit into the Title V permit.

## **APPLICABILITY OF 9 VAC 5-80-230**

This permit modification will change existing site-specific conditions through the incorporation of the New Source Review applicable requirements. This modification will be processed using the Significant Modification Procedures as defined in 9 VAC 5-80-230.

## **CHANGES TO TITLE V OPERATING PERMIT**

Changes to the Title V Operating Permit are outlined in the table attached to this Statement of Legal and Factual Basis. The table identifies the affected Title V condition with the suggested changes.

## **PUBLIC PARTICIPATION**

The public participation requirements of 9 VAC 5-80-270 apply to this significant permit modification. A 30-day public notice is required. The proposed permit will be placed on public notice in The Virginian-Pilot from October 21, 2007 to November 20, 2007.

## **PERMIT REVIEW BY EPA AND AFFECTED STATES**

The EPA and affected states review requirements of 9 VAC 5-80-290 apply to this significant permit modification. A 45-day EPA review period is required. North Carolina is an affected state, and will be notified of this significant permit modification.

**COMMONWEALTH OF VIRGINIA  
Department of Environmental Quality  
Tidewater Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

**SIGNIFICANT PERMIT MODIFICATION**

INGENCO Virginia Beach Plant  
Virginia Beach, Virginia  
Permit No. TRO61423

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, INGENCO has applied for a modification to the Title V Operating Permit for its dual fuel electric power generating facility. The Department has reviewed the application and has prepared a modified Title V Operating Permit.

Engineer/Permit Contact: \_\_\_\_\_

Date: December 6, 2007

Air Permit Manager: \_\_\_\_\_

Date: December 6, 2007

Regional Director: \_\_\_\_\_

Date: December 6, 2007

## **FACILITY INFORMATION**

### Permittee

INGENCO  
2250 Dabney Road  
Richmond, Virginia 23060

### Facility

INGENCO Virginia Beach Plant  
1989 Jake Sears Road  
Virginia Beach, Virginia

County-Plant Identification Number: 51-810-00117

## **SOURCE DESCRIPTION**

### *NAICS 221119 – Other Electric Power Generation*

This U.S. industry comprises establishments primarily engaged in operating electric power generation facilities (except hydroelectric, fossil fuel, nuclear). These facilities convert other forms of energy, such as solar, wind, or tidal power, into electrical energy. The electric energy produced in these establishments is provided to electric power transmission systems or to electric power distribution systems.

### *NAICS 221112 – Fossil Fuel Electric Power Generation*

This U.S. industry comprises establishments primarily engaged in operating fossil fuel powered electric power generation facilities. These facilities use fossil fuels, such as coal, oil, or gas, in internal combustion or combustion turbine conventional steam process to produce electric energy. The electric energy produced in these establishments is provided to electric power transmission systems or to electric power distribution systems.

Specifically, this facility is an electrical power generation facility, using engines fueled by No. 2 fuel oil, No. 4 fuel oil, mineral oil dielectric fluid (MODEF), and treated landfill gas.

The facility is a Title V major source of carbon monoxide and nitrogen oxides. This source is located in an attainment area for all pollutants. The facility is permitted under a state major permit issued on June 20, 2006.

## **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

## **REQUESTED MODIFICATION AND REASON FOR MODIFICATION**

The Virginia Department of Environmental Quality issued a significant amendment to the New Source Review permit for INGENCO on June 20, 2006. This Title V modification is for the incorporation of the conditions of the June 20, 2006 New Source Review permit into the Title V permit.

## **APPLICABILITY OF 9 VAC 5-80-230**

This permit modification will change existing site-specific conditions through the incorporation of the New Source Review applicable requirements. This modification will be processed using the Significant Modification Procedures as defined in 9 VAC 5-80-230.

## **CHANGES TO TITLE V OPERATING PERMIT**

Changes to the Title V Operating Permit are outlined in the table attached to this Statement of Legal and Factual Basis. The table identifies the affected Title V condition with the suggested changes.

## **PUBLIC PARTICIPATION**

The public participation requirements of 9 VAC 5-80-270 apply to this significant permit modification. A 30-day public notice is required. The proposed permit will be placed on public notice in The Virginian-Pilot from October 21, 2007 to November 20, 2007.

## **PERMIT REVIEW BY EPA AND AFFECTED STATES**

The EPA and affected states review requirements of 9 VAC 5-80-290 apply to this significant permit modification. A 45-day EPA review period is required. North Carolina is an affected state, and will be notified of this significant permit modification.

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**Tidewater Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

**MINOR PERMIT MODIFICATION**

Industrial Power Generating Company, LLC (aka INGENCO) Virginia Beach Plant  
Virginia Beach, Virginia  
**Permit No. TRO61423**

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, INGENCO has applied for a modification to the Title V Operating Permit for its dual fuel electric power generating facility. The Department has reviewed the application and has prepared a modified Title V Operating Permit.

Engineer/Permit Contact: \_\_\_\_\_ Date: June 23, 2008

Air Permit Manager: \_\_\_\_\_ Date: June 23, 2008

Regional Director: \_\_\_\_\_ Date: June 23, 2008

## **FACILITY INFORMATION**

### Permittee

Industrial Power Generating Company, LLC (aka INGENCO)  
2250 Dabney Road  
Richmond, Virginia 23060

### Facility

INGENCO Virginia Beach Plant  
1989 Jake Sears Road  
Virginia Beach, Virginia

County-Plant Identification Number: 51-810-00117

## **SOURCE DESCRIPTION**

### *NAICS 221119 – Other Electric Power Generation*

This U.S. industry comprises establishments primarily engaged in operating electric power generation facilities (except hydroelectric, fossil fuel, nuclear). These facilities convert other forms of energy, such as solar, wind, or tidal power, into electrical energy. The electric energy produced in these establishments is provided to electric power transmission systems or to electric power distribution systems.

### *NAICS 221112 – Fossil Fuel Electric Power Generation*

This U.S. industry comprises establishments primarily engaged in operating fossil fuel powered electric power generation facilities. These facilities use fossil fuels, such as coal, oil, or gas, in internal combustion or combustion turbine conventional steam process to produce electric energy. The electric energy produced in these establishments is provided to electric power transmission systems or to electric power distribution systems.

Specifically, this facility is an electrical power generation facility, using engines fueled by No. 2 fuel oil, No. 4 fuel oil, mineral oil dielectric fluid (MODEF), and treated landfill gas.

The facility is a Title V major source of carbon monoxide and nitrogen oxides. This source is located in an attainment area for all pollutants. The facility is permitted under a state major permit issued on April 7, 2008.

## **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

## **REQUESTED MODIFICATION AND REASON FOR MODIFICATION**

The Virginia Department of Environmental Quality issued a minor amendment to the New Source Review permit for INGENCO on April 7, 2008. This Title V modification is for the incorporation of the conditions of the April 7, 2008 New Source Review permit into the Title V permit. Specifically, changes were made to conditions III.B.1, III.B.4, and III.D.4 of the Title V operating permit.

## **APPLICABILITY OF 9 VAC 5-80-210**

This permit modification will be processed using the Minor Modification Procedures as defined in 9 VAC 5-80-210. The changes to the permit (1) do not violate any applicable requirement; (2) do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit such as a change to the method of monitoring to be used, a change to the method of demonstrating compliance, or a relaxation of reporting or recordkeeping requirements; (3) do not require or change a case-by-case determination of an emission limitation or other standard; (4) do not seek to establish or change a permit term or condition for which there is not underlying applicable federal requirement; (5) are not Title 1 modification; and, (6) are not required to be processed as a significant modification under 9 VAC 5-80-230 or an administrative amendment under 9 VAC 5-80-200.

## **CHANGES TO TITLE V OPERATING PERMIT**

This Title V modification is for the incorporation of the conditions of the April 7, 2008 New Source Review permit into the Title V permit. Specifically, changes were made to conditions III.B.1, III.B.4, and III.D.4 of the Title V operating permit.

## **PUBLIC PARTICIPATION**

The public participation requirements of 9 VAC 5-80-270 do not apply to this minor permit modification. A 30-day public notice is not required; however, a 45-day EPA review is required.

## **PERMIT REVIEW BY EPA AND AFFECTED STATES**

The EPA and affected states review requirements of 9 VAC 5-80-290 apply to this minor permit modification. A 45-day EPA review period is required. North Carolina is an affected state, and will be notified of this minor permit modification.